Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (cancelled).

2 (previously presented). A method for deriving a three-dimensional model of a scene from a plurality of images of the scene, said method comprising the steps of:

(a) generating a plurality of three-dimensional panoramic images of a scene, wherein each three-dimensional panoramic image is derived from a plurality of range images captured from a distinct spatial position;

(b) determining transformations that align the plurality of three-dimensional panoramic images;

(c) integrating spatial information from the plurality of three-dimensional panoramic images to form a spatial three-dimensional model of the scene; and

(d) integrating intensity and texture information from the plurality of three-dimensional panoramic images onto the spatial three-dimensional model to form a three-dimensional model of the scene containing both spatial and intensity information;

wherein the step (a) of generating a plurality of three-dimensional panoramic images further comprises:

(i) positioning a camera at a first distinct spatial location;

(ii) acquiring the plurality of range images of the scene by rotating the camera about a vertical axis relative to the scene, wherein there is an inter-overlap region between adjacent images;

(iii) forming a three-dimensional panoramic image about the vertical axis from the plurality of range images acquired in step (ii); and

(iv) generating a plurality of three-dimensional panoramic images by repeating steps (i) through (iii) at additional spatial positions in the scene.

3 (original). The method as claimed in claim 2, wherein the camera is a scannerless range imaging camera.

4 (currently amended). The method as claimed in claim ~~1~~ 2, wherein the step (b) of determining the transformations that align the plurality of three-dimensional panoramic images further comprises:

~~(a)~~ determining one or more pairs of three-dimensional panoramic images that contain some common scene information;

~~(b)~~ determining the transformations that align each pair of three-dimensional panoramic images that contain some common scene information; and

~~(c)~~ determining global inconsistencies in the transformations found in step (b).

5 (currently amended). The method as claimed in claim ~~1~~ 2, wherein the step (d) of integrating the intensity and texture information from the plurality of three-dimensional panoramic images assumes a Lambertian reflectance model.

6 (currently amended). The method as claimed in claim ~~1~~ 2, wherein the step (d) of integrating the intensity and texture information from the plurality of three-dimensional panoramic images assumes a reflectance model that depends on the viewpoint of the observer.

7 (currently amended). The method as claimed in claim ~~1~~ 2, wherein the three-dimensional panoramic image is a color image.

8 (currently amended). The method as claimed in claim ~~1~~ 2, wherein one or more range images are juxtaposed between a pair of three-dimensional panoramic images before initiating the step (b) of determining the transformations that align the plurality of three-dimensional panoramic images.

9 (cancelled).

10 (currently amended). ~~The computer program product as claimed in claim 9~~ A computer program product for deriving a three-dimensional model of a scene from a plurality of three-dimensional panoramic images of a scene, wherein each three-dimensional panoramic image is derived from a plurality of range images captured from a distinct spatial position; said computer program product comprising a computer readable storage medium having a computer program stored thereon for performing the steps of:

(a) determining transformations that align the plurality of three-dimensional panoramic images;

(b) integrating spatial information from the plurality of three-dimensional panoramic images to form a spatial three-dimensional model of the scene; and

(c) integrating intensity and texture information from the plurality of three-dimensional panoramic images onto the spatial three-dimensional model to form a three-dimensional model of the scene containing both spatial and intensity information;

wherein the step (a) of determining the transformations that align the plurality of three-dimensional panoramic images further comprises:

~~(a)~~ determining one or more pairs of three-dimensional panoramic images that contain some common scene information;

~~(b)~~ determining the transformations that align each pair of three-dimensional panoramic images that contain some common scene information; and

~~(c)~~ determining global inconsistencies in the transformations found in step (b).

11 (currently amended). The computer program product as claimed in claim ~~9~~ 10 wherein the step (c) of integrating the intensity and texture information from the plurality of three-dimensional panoramic images assumes a Lambertian reflectance model.

12 (currently amended). The computer program product as claimed in claim ~~9~~ 10 wherein the step (c) of integrating the intensity and texture information from the plurality of three-dimensional panoramic images assumes a reflectance model that depends on the viewpoint of the observer.

13 (currently amended). The computer program product as claimed in claim ~~9~~ 10 wherein the three-dimensional panoramic image is a color image.

14 (currently amended). The computer program product as claimed in claim ~~9~~ 10 wherein one or more range images are juxtaposed between a pair of three-dimensional panoramic images before initiating the step (a) of determining the transformations that align the plurality of three-dimensional panoramic images.

15 (previously presented). A method for deriving a three-dimensional model of a scene, said method comprising the steps of:

generating a plurality of three-dimensional panoramic images, wherein each of said three-dimensional panoramic images is derived from a respective set of range images, each said set having a different nodal point;

determining global registration positions of a plurality of three-dimensional panoramic images of a scene to provide registered three-dimensional panoramic images;

integrating spatial information from said registered three-dimensional panoramic images to form a spatial three-dimensional model of the scene; and

integrating intensity and texture information from said three-dimensional panoramic images into said spatial three-dimensional model to

form a three-dimensional model of the scene containing both spatial and intensity information.

16 (previously presented). The method of claim 15 wherein each said set has a plurality of range images all having the respective said nodal point.

17 (previously presented). The method of claim 16 further comprising capturing each said set of range images.

18 (previously presented). A method for deriving a three-dimensional model of a scene from a plurality of three-dimensional panoramic images of a scene, wherein each of said three-dimensional panoramic images is derived from a respective set of range images, each said set having a different nodal point; said method comprising the steps of:

determining global registration positions of said three-dimensional panoramic images to provide registered three-dimensional panoramic images;

integrating spatial information from the plurality of three-dimensional panoramic images to form a spatial three-dimensional model of the scene; and

integrating intensity and texture information from the plurality of three-dimensional panoramic images into the spatial three-dimensional model to form a three-dimensional model of the scene containing both spatial and intensity information.

19 (previously presented). The method of claim 18 wherein said determining step further comprises:

determining one or more pairs of three-dimensional panoramic images that contain some common scene information;

determining the transformations that align each pair of three-dimensional panoramic images that contain some common scene information; and

determining global inconsistencies in said transformations.

20 (previously presented). The method of claim 18 wherein said determining step further comprises:

converting each said three dimensional panoramic range image into a mesh representation;

identifying overlapping mesh representations;

computing local transformations representing respective said registrations; and

checking global consistency of said local transformations.